### (19) World Intellectual Property Organization

International Bureau





## (43) International Publication Date 18 August 2005 (18.08.2005)

**PCT** 

# (10) International Publication Number WO 2005/075489 A1

(51) International Patent Classification<sup>7</sup>: C07F 15/00

(21) International Application Number:

PCT/IN2004/000035

(22) International Filing Date: 5 February 2004 (05.02.2004)

(25) Filing Language: English

(26) Publication Language: English

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### **Published:**

with international search report

[Continued on next page]

(54) Title: A PROCESS FOR THE PERPARATION OF AN ANTI-TUMOR PLATINUM (II) - COMPLEX

(57) Abstract: We disclose here processes for making Platinum complex of general formula (I) where in , the conformation of 1,2-diaminocyclohexane is cis, trans-l or trans-d isomer and R<sub>1</sub> and R<sub>2</sub> combinedly make dicarboxylic acid having formulae (II),(III) and (IV), here in, the two carboxylic acid groups are on the same or on vicinal carbon atoms, n is zero or an integer ranging from 1 to 5 and R<sub>3</sub> is either hydrogen or a substituent with electron withdrawing or electron releasing effects exemplified by alkoxy, halo, and nitro groups by reacting a compound of formula M<sub>2</sub>PtX<sub>4</sub> wherein X represents halogen atom such as Cl or Br or thiocyanate with (i) 1,2-diaminocyclohexane (ii) source of silver ion selected from a silver compound containing divalent anion in presence of a corresponding carboxylic acid of formula (II) or (III) or (IV) to get the compound of formula (I), purifying the said compound by treating with alkali metal iodide and isolating the title compound by any conventional methods. The preparation of the said compound involves, for the first time, the intermediate formation of cis-Diiodo-trans-l-1,2-diaminocyclohexane platinum(II) and biscarboylato-trans-l-1,2-diaminocyclohexane platinum(II).

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.